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ABSTRACT

High Intensity Tutoring is a cross-age tutoring project for sixth, seventh, and eighth graders. The project features drill in basic reading and math facts and the use of programed workbooks. Teachers distribute candy and other rewards on the basis of points earned by students acting as either tutors or tutees. Tutor-tutee pairs are assigned so that the tutor is approximately two years ahead of the tutee in reading and math skills. Tutees often advance to become tutors. Teachers and aides unobtrusively monitor tutoring, keep detailed records of the percent of errors each tutee makes, and assign materials tutees can complete with 90% to 94% accuracy. This brochure describes the program's approach and requirements in terms of instruction, management/communication, personnel, materials/equipment, facilities, and costs. Criteria to consider in adopting the program and a timetable for getting started are also outlined. (AA)

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High Intensity Tutoring Project

Analysis and Selection Kit

CS 002 891

2

High Intensity Tutoring Project

HIT is a cross-age tutoring project for sixth through eighth graders having difficulty in reading and math. Students leave their regular classrooms to participate.

Students	Tutees are sixth and seventh graders; tutors are seventh and eighth graders. Tutees are selected by test scores and classroom teachers' judgment. Tutors participate voluntarily and are selected by project teachers.
Staff	A project director and secretary work part-time on HIT. Each HIT center is staffed by one full-time teacher selected from the project school and two full-time paraprofessionals.
Student/Staff Ratio	Ten to 12 tutor/tutee pairs are in a HIT center with three staff members for each half-hour period.
Facilities	Each HIT center requires one classroom, typically located in the project school. The project director needs office space in the district administration building.
Instruction	Instruction in HIT consists of fast-paced, almost rhythmic drill in basic skills and practice in programmed materials. Teachers select material so tutees answer 90-94 percent of the questions correctly each day. Teachers distribute candy and other rewards to tutees and tutors. Tutors affirm or correct each tutee response and record points earned.
Training	HIT teachers and aides attend a two-week training workshop before the centers open and weekly informal sessions throughout the year.
Scheduling	Students are scheduled by the project teachers in consultation with classroom teachers for daily half-hour sessions in each or only one subject. There are five tutoring periods everyday but Friday. Friday afternoons are reserved for in-service meeting and record keeping. Breaks between sessions are used for record keeping and organizing materials for instruction.

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HIT

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High Intensity Tutoring is one of six projects selected as unusually successful for teaching reading and/or mathematics to underachieving students in low-income areas. Project Information Packages including detailed guidelines for installing and operating these projects are available from the U.S. Office of Education to qualifying school districts.

As Suzanne walks into the HIT center, she remembers when she was a tutee two years ago, as a sixth grader. She had looked forward to becoming a tutor, to coming early and checking her tutee's folder, to being ready with drill materials, and finally to staying for a few minutes after class and playing a math game with the other tutors. Now that she does tutoring, she takes pride in the gains her tutees are making and enjoys helping them work fast to earn points. Today she'll tutor Carl, first with multiplication flash cards and a Roman numeral clock, then in a programed workbook. Carl was shy and slow at first, afraid of getting answers wrong, but Suzanne has noticed a real change in him since he began working on materials he can complete with almost no mistakes. Suzanne enjoys the rhythm of recording a slash for each right answer and sharing the right answer when her tutee makes a mistake, which isn't very often. She knows Carl looks forward to the candy rewards he receives, and she has found her role as a tutor even more rewarding than candy.

High Intensity Tutoring

(HIT)

High Intensity Tutoring is a cross-age tutoring project for sixth, seventh, and eighth graders. The project features drill in basic reading and math facts and use of programmed workbooks. Teachers distribute candy and other rewards based on points earned by tutees and tutors. Two well-respected teachers from each project school operate the reading or math HIT centers, each in a separate classroom. The unique features of HIT are its high intensity and cross-age tutoring.

HIT is fast paced. Tutoring lasts only 30 minutes, with the first 10 minutes devoted to quick drill. Tutees read word lists in reading and use flash cards and drill sheets in math. They spend the remainder of the period on programmed reading and math workbooks. HIT offers intense practice of basic skills rather than discussion, inquiry, or lecture methods.

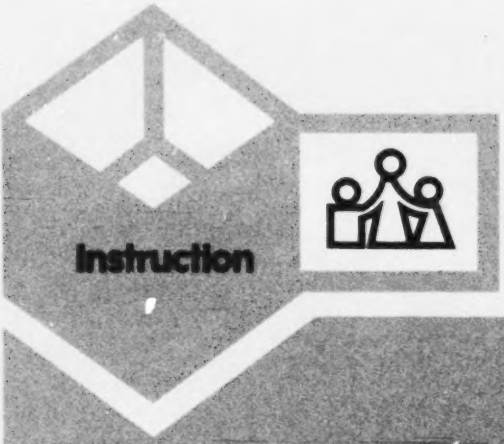
HIT drill and programmed materials lend themselves to accurate, immediate correction. Tutors record each response as it is made and tell tutees correct answers as needed. Tutors do not break the pace for lengthy explanations, nor do teachers. The pace also keeps going despite changes in activities; tutees are kept busy while tutors obtain new materials.

Tutees are eager to earn points, one for each correct response, so they can have candy rewards. The short instruction period, structured drill materials, tutoring techniques, and candy rewards all contribute to the success of this high intensity instruction.

Teachers recruit tutors from the seventh and eighth grades to work with sixth- and some seventh-grade tutees. Teachers assign tutor-tutee pairs so that the tutor is approximately two years ahead of the tutee in reading and math skills. Tutees often advance to become tutors. Teachers and aides unobtrusively monitor tutoring, keep detailed records of the percent of errors each tutee makes, and assign materials tutees can complete with 90-94 percent accuracy.

Project Origin

HIT was developed by two reading teachers with reinforcement techniques suggested by a university consultant. It was an ESEA Title I project in Highland Park, Michigan, and has been in operation there since 1970. HIT has been implemented in several other school districts nationwide since its inception.



- Done by tutors and managed by teachers and aides.
- Carefully structured and fast-paced.
- Uses programmed and drill materials.
- Sixth, seventh, and eighth graders.
- Thirty minutes of active drill.
- Student-staff ratio eight to one.
- Candy and other rewards for correct answers.

Instruction in both reading and math HIT centers follows a carefully delineated procedure. Tutees leave their regular classes, such as science, each day. Tutors who are about two years ahead of their tutees in skills work for half-hour sessions at a rapid pace, using flash cards, word lists, and other drill materials for approximately the first 10 minutes and programmed materials for the next 20.

Teachers and aides keep track of the progress of tutors and tutees, maintain daily progress charts for tutees, and assign harder or easier materials as necessary to ensure that students get 90-94 percent correct each day.

HIT teachers manage five sessions a day, monitoring and facilitating the tutoring process. They circulate through the center and make sure tutoring is going smoothly. Teachers and aides tutor when needed and occasionally are called on to answer questions. Tutors attend three sessions per week, missing a different class each day. They complete homework in classes they have missed.

For drill, HIT students in reading centers use a booklet with sets of word lists gradated for difficulty. Math center students use about 20 kinds of drill materials, including flash cards, fraction boards, Roman numeral clocks, and other teacher-made and commercial materials designed to teach basic facts.

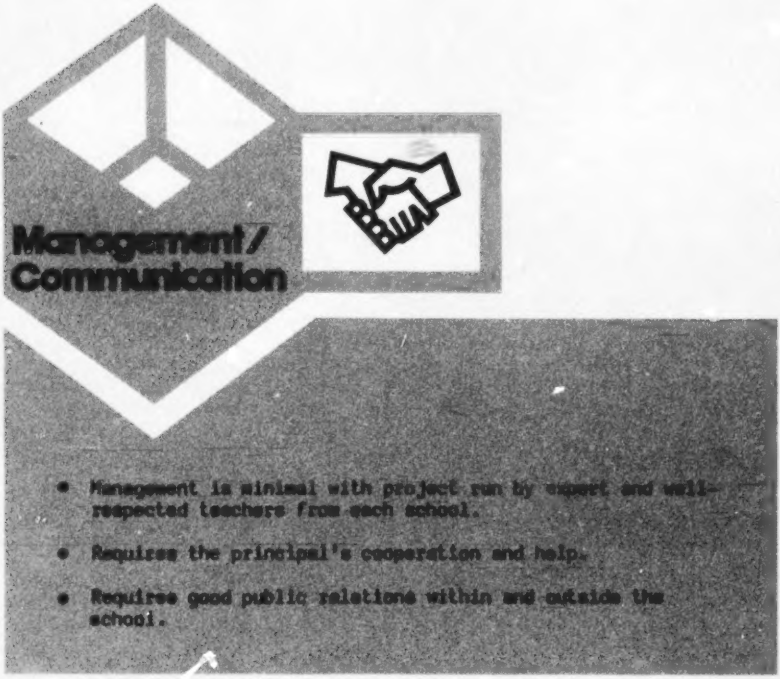
In addition to drill materials, students use carefully structured programmed reading and math booklets. The materials which have been found to lend themselves best to tutoring require almost no directions; a similar format is used throughout the series so that time is not lost explaining what to do on each page. The materials have answers printed in the student's booklet in a way that facilitates immediate, accurate self-correction. Teachers identify a student's entry level in the materials by administering a placement test. Thereafter, students use one booklet after another in the series, with adjustments in assignments if their error rates show that harder or easier material is needed. Student time is considered valuable; the tutoring session is used entirely for skills practice. Students write only when they need to figure problems, and do reading orally. Assignments and materials are already on their desks when they arrive, and they proceed without roll call or announcements.

Since some students do not respond to programmed materials, teachers must be prepared to diagnose their needs and make other assignments, placing the students with expert tutors.

Rewards, an integral part of the HIT process, are distributed according to the number of correct answers (hence points) tallied for tutees and sessions attended for tutors. Students usually select candy, though other rewards also may be offered.

CAUTION: Many teachers object to using candy as a reward.

CAUTION: Teachers must be capable enough to manage instruction without interrupting the pace of tutoring.


Management/
Communication
• Management is minimal with project run by expert and well-respected teachers from each school.
• Requires the principal's cooperation and help.
• Requires good public relations within and outside the school.

In HIT, the project director is a district-level administrator, probably running many other projects along with HIT. Because of this, and because HIT teachers manage instruction with almost no supervision, it is crucial that the HIT project director be able to identify two of the best-respected teachers in each school. The director must have enough influence in the district, especially with the principals, to secure their release. Along with this vital task, much of the director's other important work takes place during the early stages. Between May and the following September, he or she paves the way for the project. Thereafter, the director's role is providing help as needed for the implementation of a straightforward set of learning experiences. Because both planning and instructional phases draw upon the resources and the cooperation of the schools where the project takes place, the director relies upon the building principals for day-to-day support and cooperation.

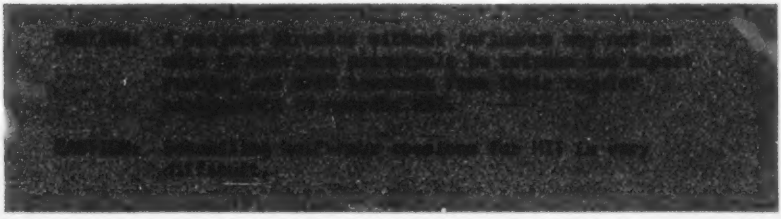
HIT requires scheduling a great many students for half-hour sessions. This causes considerable trouble for school personnel. Lengthening the period results in boredom and misbehavior, so it is recommended that administrators plan some way of operating HIT with half-hour periods, perhaps as part of study-hall periods. Scheduling should be delayed until after school begins and be completed by teachers. Project teachers can then consult with regular teachers about their

recommendations on which students should come to the HIT centers as tutors, and so that the project teachers can describe the project personally to regular teachers. The fact that well-respected teachers from the school operate the HIT centers smooths the difficult early weeks of the project. Once the project is in motion, the director need work only 10 percent time to keep the project running smoothly.

The main budgetary responsibility of the director is to allocate to the teachers a monthly reward allowance that is used to purchase candy and other prizes for tutees and to cover the cost of field trips for the tutors. The director also balances the budget at the end of each month.

The other major management responsibility in HIT is training. The HIT project director must either conduct two weeks of training before school opens to model tutoring behaviors and explain record keeping and scheduling, or hire a consultant to conduct appropriate training for HIT.

Once school begins, the project's very capable teachers and aides are able to run HIT with only minimal assistance from the director. The project's structured mechanism virtually runs itself, step by step, as the year progresses. The director is always available to the center staff when problems arise. In-service training is held each Friday afternoon. Sessions are often spent completing records or sharing ideas. Occasionally HIT teachers meet with the project director for discussion.



HIT: ESTIMATING COSTS [1]
(Four centers, 240 tutees, 320 tutors)

	Number	Estimated Total Cost to Project
ANNUAL COSTS		
Personnel		
Project Director [2]	.1	_____
Secretary to Project Director [2]	.1	_____
Teachers	4.0	_____
Aides	8.0	_____
Facilities [3]		
Project Director's Office	1	_____
Classrooms	4	_____
Materials/Equipment		500.00
Other		
Rewards, Tutor and Tutee		2,400.00
Total Estimated Annual Cost		_____
ADDITIONAL START-UP COSTS		
Personnel		
Project Director (April-August, 25% time)		_____
Training Stipends for Staff (two weeks)		_____
Materials/Equipment		1,500.00
Total Estimated Start-up Cost		_____

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[1] See page 9 of the Project Selection Guide.

[2] If this salary would not be charged to project funds, enter zero.

[3] Space may be available within district at no cost to project.

HIT ORGANIZATION

- Administrative personnel
  Project director and secretary (both 10% time during school year)

- Instructional staff (per center)
  Teacher
  Two aides

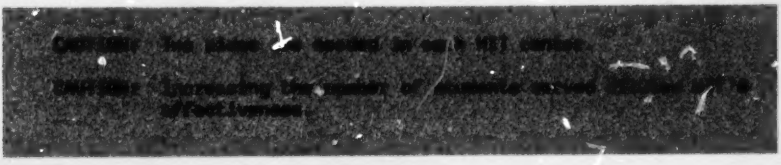
- 50-70 tutees and 70-100 utors served each year

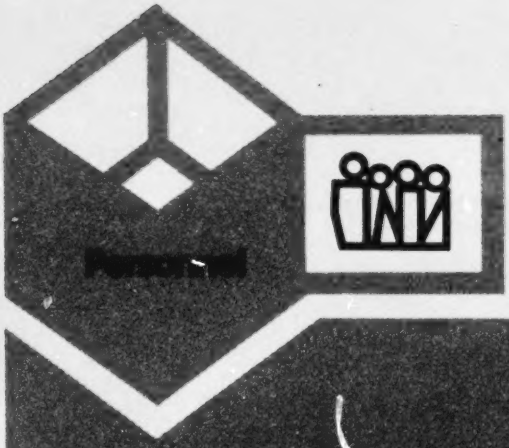
HIT requires a project director to work one-quarter time during project planning and start-up and 10 percent time during the school year. Secretarial support is needed for the director.

With 10 to 12 tutor/tutee pairs in the center at one time, up to 70 tutees and 100 tutors can be involved each year.

HIT should begin with at least two centers in both reading and math in the district so the project staff can support one another and share instructional ideas.

HIT centers are located in the schools they serve or in neighboring relocatable classrooms. Students drawn from all the sixth, seventh, and eighth grade classrooms participate all year.





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The HIT staff consists of a part-time project director, teachers, and aides.

The success of HIT depends more on the qualifications of teachers than on the project director's skills once teachers are selected. Teachers should be carefully selected from the project schools' staff of established teachers, not brought in from outside. Aides must have good organizational and management skills, since their role is similar to the teachers'.

HIT Project Director

HIT requires a director who is an established, district-level administrator (often the federal projects director), willing and able to allocate to the project 25 percent time initialiy and 10 percent time after the project has begun.

The director must be able to identify participating schools and to convince those principals to assign their two best-respected teachers to the project and to offer continuing support and coordination of the project within their schools.

The project director must be able to convince teachers of the good results that come from cross-age tutoring and must help secure permission from tutors' teachers for their release. He or she must also be able to present the project to the schools and community so that it is understood and accepted.

During the early phase of the project, the director has the tasks of ordering materials and compiling lists of potential center participants. He or she determines what test data are already available, plans any necessary further tests, and integrates pre- and posttesting with the regular school schedule. The project director must also either carefully plan and conduct HIT training before school starts or hire a consultant to do this.

CAUTION: Project directors who are parallel with teachers in the district hierarchy have too little influence with principals.

CAUTION: Project directors who wait for volunteers or principal nominees may end up with poor teachers or have to hire from outside the school.

CAUTION: Principals acting as project directors are likely to hesitate to act on matters that affect another principal's school or on budgetary matters usually handled at the district office.

HIT Teachers

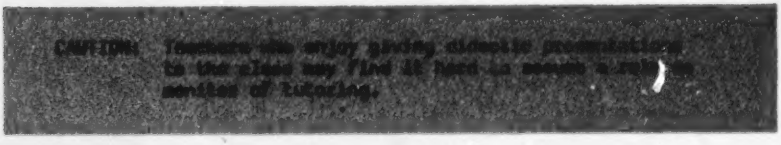
Teachers in HIT typically have many years' successful teaching experience as well as previously established working relationships with other teachers in the school. Highly successful, they are chosen by the project director from among the best reading and math teachers in the school. In a smoothly functioning HIT project, the regular teachers know that the HIT teacher's role is complementary to their own. The project teachers must be able to proceed in a way that takes into account the needs of the regular teachers, fully understanding the project's role within the total school program. A typical HIT teacher is a former reading specialist, well known in the school as capable.

HIT teachers must have extensive organizational skills. They must keep close track of the activities, schedules, and progress of both tutors and tutees. They must also provide guidance to their tutors and aides while treating them as fellow instructors.

A tolerance for extensive, detailed paperwork is necessary for HIT teachers. With the help of the aides, they maintain daily progress charts for all tutees and each day figure the number of correct responses and the percentage of errors made in order to adjust students' assignments for the following day, as necessary. They also keep track of attendance of tutors and tutees, of the points earned by the tutees, and of the inventory of rewards in stock.

Teachers must be familiar with and willing to follow a highly structured instructional procedure. They must be able to monitor and facilitate the tutoring process, circulating through the HIT center during each period to check progress and ensuring that tutees are receiving correct feedback. They must be willing to use the entire period for tutoring and forgo didactic interaction with the class.

Finally, teachers must be able to use commercial programmed reading and math materials. Two sets of such materials make up the bulk of the materials used in HIT. Teachers must be able to make drill materials that lend themselves to the tutoring process.



HIT Aides

Aides in the HIT center have or are developing skills similar to those listed for teachers, but they are not certificated. They must be able to ensure that students are working correctly on the materials the teacher has assigned to them. The aide constantly circulates through the center during sessions, making sure that the tutee-tutor pairs are using proper materials and that the tutor is providing adequate feedback. Aides also check to see that the students are recording the correct number of points earned. Aides, with teachers, complete the detailed records kept on student progress each day.

CAUTION: Since they have a similar role to that of the teacher, aides should be chosen who won't resent having lower pay for a similar job.

- Drill and programmed materials in reading and math centers.
- Supplementary books and games.

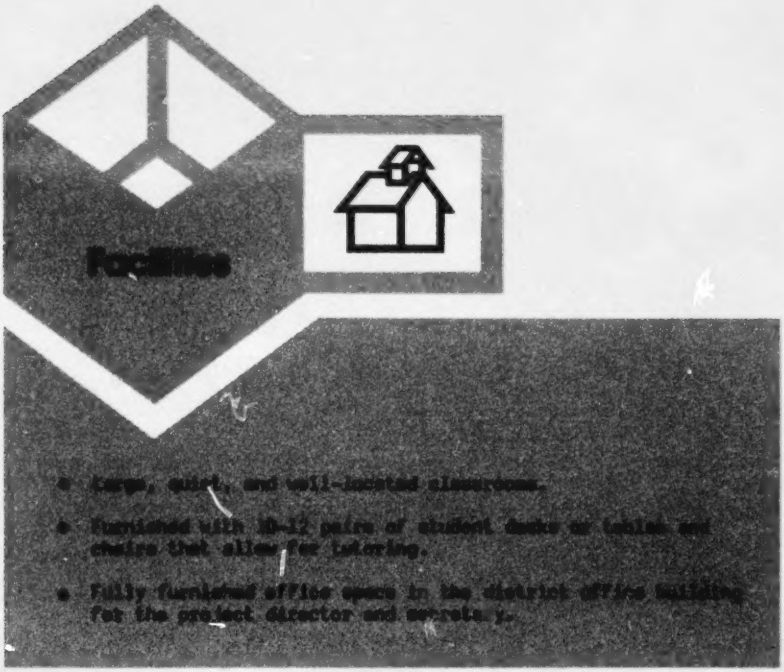
In both reading and math HIT centers, students use drill and programmed materials along with placement tests and standardized tests. Drill materials are designed to teach basic sight vocabulary in reading and basic facts in math. Comprehension and problem-solving skills are taught using programmed and supplementary materials.

The materials can be used simultaneously by tutors and tutees. Tutors reinforce their basic skills by checking each answer as it is made.

The project director orders a sufficient supply of HIT materials at all levels in a series so that students may begin the program directly after the placement test. Tutees enter answers on acetate sheets so that materials are reusable. Publishers have encouraged delaying ordering until after students take a placement test, but this delays beginning instruction for several weeks. Since many students will be using the same set of materials during different periods, it is wise to order about 20 complete sets.

Finally, HIT provides some supplementary books as a reference library for tutors and tutees to use at the end of the school year if they finish all the programmed readers. HIT centers are also supplied with a few games to be used occasionally.

CAUTION: HIT uses fewer colorful and popular non instructional materials than some other projects.


Facilities
• Large, quiet, and well-located classrooms.
• Furnished with 10-12 pairs of student desks or tables and chairs that allow for tutoring.
• Fully furnished office space in the district office building for the project director and secretary.

Each HIT project school must have a large classroom available for each HIT center. The classrooms should be located in a convenient place for students. The rooms should be comfortable and accoustically adequate to absorb some of the noise of fast-paced tutoring. If two classrooms are not available, administrators might consider installing only a reading (or math) HIT center, or installing temporary buildings to house the project. Care should be taken not to take space for a HIT center at the expense of some other important area in the school, such as the gym, teachers' lounge, or a needed classroom. Students should not be asked to go for special help to a confining, windowless, or tiny room.

No special furniture is required for the project. The classrooms should be equipped with 10 to 12 pairs of student desks, one pair for each tutor to use with his or her tutee. The project director may wish to order special tutoring desks or tables if regular desks are not available.

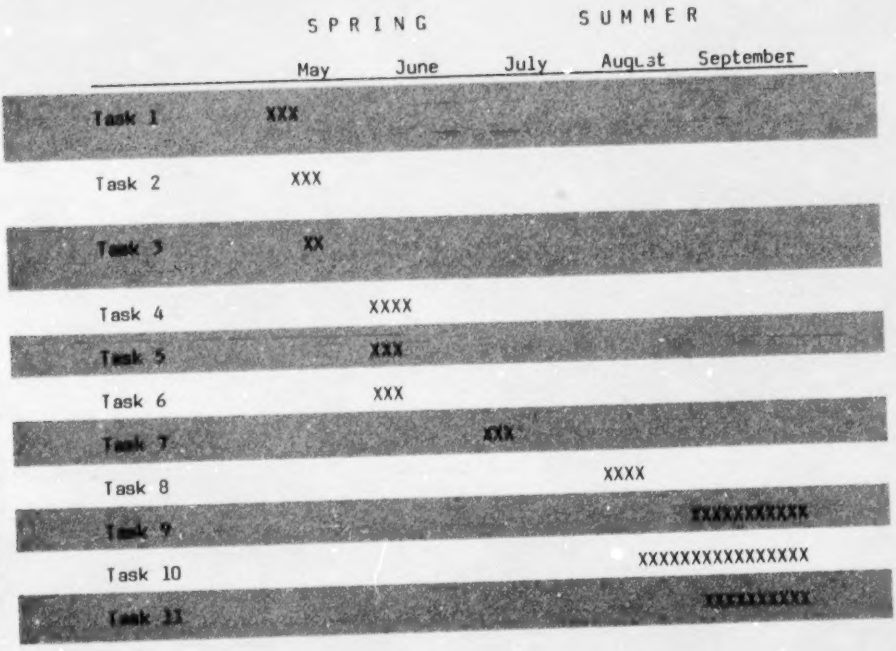
In addition, the HIT center classrooms should contain a locked cabinet for storing candy rewards, file cabinets for student records, a teacher's desk, and two or three tables and a storage shelf for instructional materials.

HIT GETTING STARTED

If your district elects to implement HIT, and your application for the PIP is approved, the project director will have many planning tasks to complete before training and instruction begin in the fall. The director's role is extremely important. The same person should carry out initial tasks and subsequent troubleshooting. He or she should start quarter-time in May to carry out the required start-up tasks within the time frame shown on the chart facing this page.

The project director:

1. begins work, secures office space, and familiarizes self with project.
2. orients personnel of tentatively identified schools and other relevant administrators.
3. makes tentative selection of teachers and arranges with principals for their release.
4. surveys furniture and materials.
5. orders necessary furniture and materials for centers.
6. hires external evaluator or designs project evaluation.
7. interviews aide applicants.
8. completes aide interviews and selects aides.
9. monitors preparation of centers.
10. plans start-up training workshop for staff.
11. conducts start-up training workshop for staff.


SPRING
SUMMER
May
June
July
August
September
Task 1
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Task 2
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Task 11
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HIT

ADOPTION CRITERIA

INTENTION

Select High Intensity Tutoring only if your school district can meet the following project requirements:

INSTRUCTION

- Carefully structured and fast-paced.
- Done by tutors and managed by teachers and aides.
- Candy and other rewards for correct answers.

MANAGEMENT/COMMUNICATION

- Minimal outside direction, with teachers running project.
- Requires principal's help.
- Requires good public relations within and outside school.

ORGANIZATION

- Serves up to 70 tutees per center.
- Tutees in sixth and seventh grade and tutors in seventh and eighth.
- Each center has one teacher and two aides.
- Two to four centers per district.

HIT

ADOPTION CRITERIA

CAPABILITY

Select High Intensity Tutoring only if

The following resources are available:

PERSONNEL

- District-level administrators work 25 percent initially, then 10 percent.
- Two expert and well-respected teachers from each project school.
- Four aides monitor tutoring and assist with record keeping.

MATERIALS/EQUIPMENT

- Word lists and programmed materials for reading.
- Flash cards and other drill materials, and programmed workbooks for math.

FACILITIES

- Ten-twelve pairs of student desks.
- Large classroom with standard furniture.

You can meet the schedule for getting started:

- Project director starts in May.
- Teachers selected in May.
- Materials ordered in June.
- Aides hired in August.
- In-service training in August - September.

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